

## REMARKS

### CLAIMS

#### **REJECTION OF CLAIM 4 UNDER 35 U.S.C. § 102(b)**

Claim 4 has been rejected under 35 U.S.C. § 102(b) as being anticipated by Alley ("Automatic Identification of Voice Band Telephony Coding Schemes using Neural Networks").

#### **Dependent Claim 4 / New Claim 120**

Regarding Claim 4, the Office Action states:

Regarding claim 4, *Alley* discloses that one of the statistical parameters employed to identify a type of encoding is a probability distribution histogram of the 'error' output of the adaptive filter (Page 1156, Left Column); the MSE probability histogram is produced by finding the maximum and minimum values of the MSE, and dividing the range into 20 bins, where the number of samples in each bin is termed the frequency of occurrence (Page 1156: Right Column: Figure 2); each of the bins in the MSE probability histogram represents "a range of values" for a parameter of the mean square error (MSE) produced from the data on the telephony channel.

*See* Office Action at pages 4-5.

Claim 4 recites "The method of Claim 1 wherein said at least one parameter comprises a number of words of said voice data stream corresponding to a range of values."

The Applicant believes that Claim 4 recites patentable subject matter. As a consequence, the Applicant has incorporated this patentable subject matter into its base claim - independent Claim 1, and has presented the patentable subject matter as new Claim 120.

The Office Action references Alley, at page “mean squared error” as a “statistical parameter,” a “mean squared error” does not teach “a *number of words* of said voice data stream corresponding to a range of values,” as recited in Claim 4 (emphasis denoted in *italics*). While a “mean squared error” may be considered a statistical parameter, a “mean squared error” does not teach a “number of words” of a voice data stream. Therefore, the Applicant respectfully submits that Alley does not teach what is recited in Claim 4. For at least this reason, the Office Action has not shown a teaching of what is recited in Claim 4. Thus, Claim 4 contains patentable subject matter. The Applicant respectfully submits that the patentable subject matter recited in Claim 4 should be advanced to allowance. Consequently, the patentable subject matter of Claim 4, which has been incorporated into its base claim and is presented as new Claim 120, should be passed to allowance.

#### **REJECTION OF CLAIM 2 UNDER 35 U.S.C. § 103(a)**

Claim 2 was rejected under 35 U.S.C. § 103(a) as being anticipated by Alley in view of Zhang et al. ('963).

#### **Dependent Claim 2 / New Claim 121**

Regarding Claim 2, the Office Action states:

*Alley* discloses identifying encoding methods including logarithmic A-law and  $\mu$ -law, but omits identifying encoding methods including linear G.711. However, it is maintained that G.711 is a common coding standard, known as pulse code modulation (PCM), for encoding speech in telephone networks. Generally, standard PCM is linear G.711 for encoding speech, but A-law and  $\mu$ -law are nonlinear or logarithmic versions of G.711. (See *Wikipedia*.) Specifically,

*Zhang et al.* ('963) teaches a method of identifying an encoding type from the internationally standardized PCM protocol set forth in ITU-T Recommendation G.711, including A-law and  $\mu$ -law. (Column 1, Lines 20 to 64) An objective is to enable a receive modem to accurately identify an encoding law, regardless of whether the transmission levels are A-law or  $\mu$ -law. (Column 2, Lines 15 to 25) It would have been obvious to one having ordinary skill in the art to identify encoding modes of linear G. 711, i.e. standard PCM, or G.711 A-law and  $\mu$ -law as taught by Zhang et al. ('963) in a method of automatic identification of voice band telephony coding of Alley for a purpose of enabling a modem to accurately identify an encoding mode regardless of transmission levels.

See Office Action at pages 5-6.

Claim 2 recites "The method of Claim 1 wherein said type of encoding comprises linear G.711,  $\mu$ -law G.711, and A-law G.711."

The Office Action refers to an article from Wikipedia (hereinafter "article") to show a teaching of "linear G.711" as recited in Claim 2. However, the article does not disclose anything about "linear G.711." In fact, the article, at the second paragraph, states that "G.711 represents logarithmic pulse-code modulation (PCM) samples for signals of voice frequencies, sampled at the rate of 8000 samples/second." Therefore, this article deals only with describing logarithmic (i.e., A-law and  $\mu$ -law) G.711. As a consequence, the article does not teach what is recited in Claim 2. Furthermore, the article should not be considered a valid reference since it originates from wikipedia.org, which comprises a "working document" that is subject to change over time. As stated in [www.en.wikipedia.org/wiki/Main\\_Page](http://www.en.wikipedia.org/wiki/Main_Page), Wikipedia is "a free encyclopedia that anyone can edit," which is an acknowledgment that it may not be accurate. In addition, the article is of unknown origin because it does not provide any bibliography (i.e., no author and no

publication date is provided) whatsoever. In other words, even if the relied upon article is a valid reference, there is no evidence whatsoever that it is in fact prior art to the present Application. Therefore, because of at least the foregoing reasons, the Applicant respectfully submits that the G.711 article should be disregarded as a prior art reference. Furthermore, Wikipedia does not make any guarantee of validity of the information presented. In its General Disclaimer, located at <http://en.wikipedia.org/wiki/Wikipedia:Disclaimers>, Wikipedia states "Please be advised that nothing found here has necessarily been reviewed by people with the expertise required to provide you with complete, accurate or reliable information." In addition, Wikipedia further states "That is not to say that you will not find valuable and accurate information in Wikipedia; much of the time you will. However, Wikipedia *cannot guarantee the validity* of the information found here. The content of any given article may recently have been changed, vandalized or altered by someone whose opinion does not correspond with the state of knowledge in the relevant fields." Thus, the Office Action does not show a teaching of Claim 2.

Furthermore, the Applicant respectfully submits that Zhang does not teach what is recited in Claim 2. For example, Zhang does not teach anything about "linear G.711," as recited in Claim 2. While Zhang, at col. 2 lines 20-23 discloses that "the 20 codec type detection scheme is based upon the transmission levels utilized by the PSTN, regardless of whether such levels are  $\mu$ -law or A-law levels," Zhang does not disclose anything about "linear G.711" as recited in Claim 2. Therefore, for this reason alone, the Office Action has not shown a teaching of what is recited in Claim 2.

Consequently, for at least the foregoing reasons, a prima facie case of obviousness has not been established. Thus, Claim 2 contains patentable subject matter. The Applicant respectfully submits that the patentable subject matter in Claim 2 should be advanced to

allowance. Thus, the Applicant has incorporated the patentable subject matter into base Claim 1, and has presented the patentable subject matter as new Claim 121. Hence, the Applicant respectfully requests allowance of Claim 121.

## **ALLOWABLE SUBJECT MATTER**

### **Claims 37-51**

The Examiner has allowed Claims 37-51. Applicant appreciates and gratefully acknowledges the indication by the Examiner that Claims 37-51 have been allowed.

## **NEW CLAIMS 104-121**

### **Independent Claim 104 and Dependent Claims 105-119**

New independent Claim 104 is drawn to a corresponding system that comprises the allowable elements and/or features presented in its corresponding allowable method claim (i.e., Claim 37). In other words, Claim 104 comprises the allowable subject matter recited in Claim 37. Therefore, new independent Claim 104 is in condition for allowance. New Claims 105-117 are drawn to a system that mirrors the allowable subject matter recited in Claims 38-51, respectively. Therefore, Claims 105-117 are allowable as well. Furthermore, Claims 105-117 are in condition for allowance for at least the reason that they depend on an allowable independent Claim 104. New dependent Claims 118-119 are in condition for allowance for at least the reason that these claims depend on an allowable independent Claim 104.

### **Independent Claim 120**

As per the arguments previously presented by the Applicant in this response with respect to Claim 4, Claim 120 is in condition for allowance since the allowable subject matter of Claim 4 has been incorporated into independent Claim 1.

**Independent Claim 121**

As per the arguments previously presented by the Applicant with respect to Claim 2 in this response, Claim 121 is in condition for allowance since the allowable subject matter of Claim 2 has been incorporated into independent Claim 1.

### CONCLUSION

Based on at least the foregoing, the Applicant believes that Claims 37-51 and 104-121 are in condition for allowance. A Notice of Allowance is courteously solicited. Should anything remain in order to place the present Application in condition for allowance, or should the Examiner disagree or have any question regarding this submission, the Examiner is kindly invited to contact the undersigned at (312) 775-8246.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

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Respectfully submitted,

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